

Date: Monday, 12/10/2007 12:04:30 PM  
 User: Kim Johnston

## Process Sheet

Customer : CU-DAR001 Dart Helicopters Services	Drawing Name : LEFT ARM WELDMENT
Job Number : 36231	
Estimate Number : 12106	
P.O. Number : N/A	Part Number : D33541
This Issue : 12/10/2007 S.O. No. : N/A	Drawing Number : D3354 REV. B
Prsht Rev. : NC	Project Number : N/A
First Issue : N/A	Drawing Revision : B
Previous Run : 30388	Material : N/A
Written By : <i>[Signature]</i> 07-12-11	Due Date : 12/24/2007
Checked & Approved By : <i>[Signature]</i>	Qty: 6 Um: Each
Comment : est rev. A New issue EC	

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

1.0	M4140HR1000	Inventory
-----	-------------	-----------



Comment: Qty.: 1.0763 f(s)/Unit Total : 6.4575 f(s)  
 AISI 4140 ROUND BAR  
 Dia. 1.00" batch: *M106565*

*080107*

2.0	BAND SAW	BAND SAW
-----	----------	----------



Comment: BAND SAW  
 Cut blank 12.30" long

*080107*

*6*

3.0	LATHE CONV.	CONVENTIONAL LATHE
-----	-------------	--------------------



Comment: CONVENTIONAL LATHE  
 Turn as per Dwg D3354

*080107*

*6*

4.0	MILLING CONV.	CONVENTIONAL MILLING MACHINE
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Comment: CONVENTIONAL MILLING MACHINE  
 1- Mill as per dwg D3354

2-Deburr as per dwg D3354

*080111*

*6*

5.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
-----	-----	--



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

*080111*

*6*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes ☒ No ☐ DQA: 10 Date: 08/01/15  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Monday, 12/10/2007 12:04:30 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: LEFT ARM WELDMENT

Job Number: 36231

Part Number: D33541

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC8

SECOND CHECK



Comment: SECOND CHECK

*mk 08/01/14*

(4)

7.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: *479*

*8/1/14 sq*

(6x)

8.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

*08/01/15*

Job Completion



*08-01-15*

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

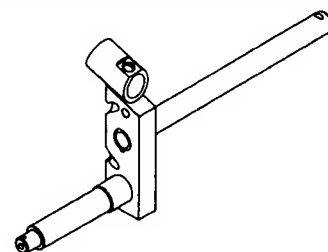
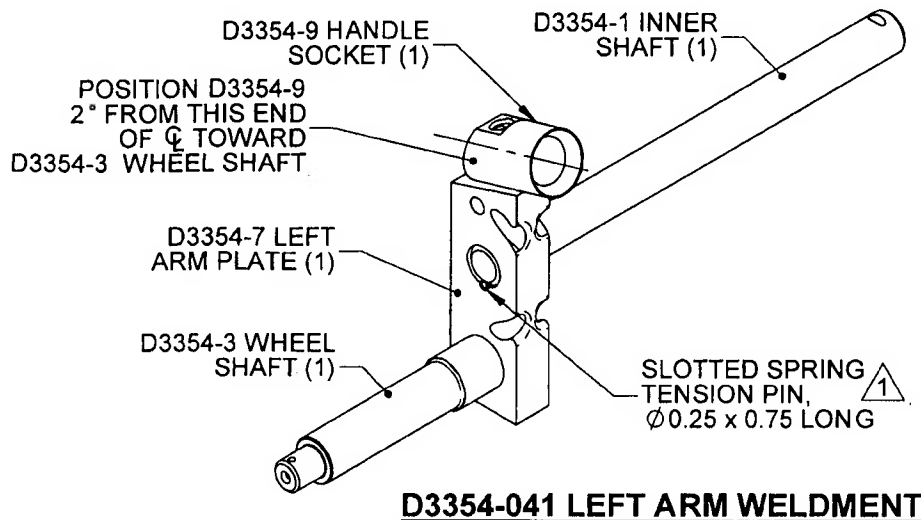
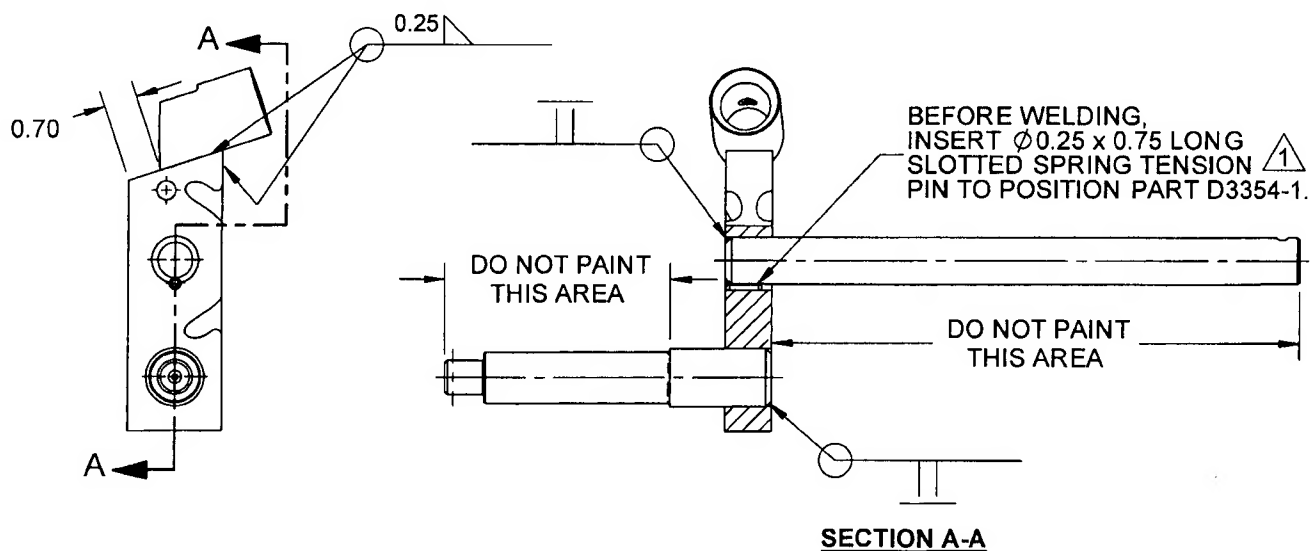
QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**DART****RELEASED**  
07.12.07

DESIGN <i>RF</i>	DRAWN BY <i>DC</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>lb</i>	APPROVED <i>Wp</i>	DRAWING NO. <b>LEFT ARM WELDMENT</b>	REV. C SHEET 1 OF 7
DATE <b>07.12.06</b>		TITLE <b>D3354</b>	SCALE 1:4
REV	DATE	DESCRIPTION	
A	04.12.13	NEW ISSUE	
B	07.02.02	REVISED DIMENSIONS	
C	07.12.06	CHANGE TOLERANCE ON D3354-7 LEFT ARM PLATE HOLE FOR D3354-3 WHEEL SHAFT	

**D3354-042 MIRROR  
ARM WELDMENT****NOTES:**

- 1) POSSIBLE SUPPLIER: SPAENAU, P/N TP-134
- 2) WELD PER DART QSI 004
- 3) FINISH: POWDER COAT PAINT FIRE RED (4.3.5.10) PER DART QSI 005 4.3
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) BREAK ALL SHARP EDGES 0.010 TO 0.020

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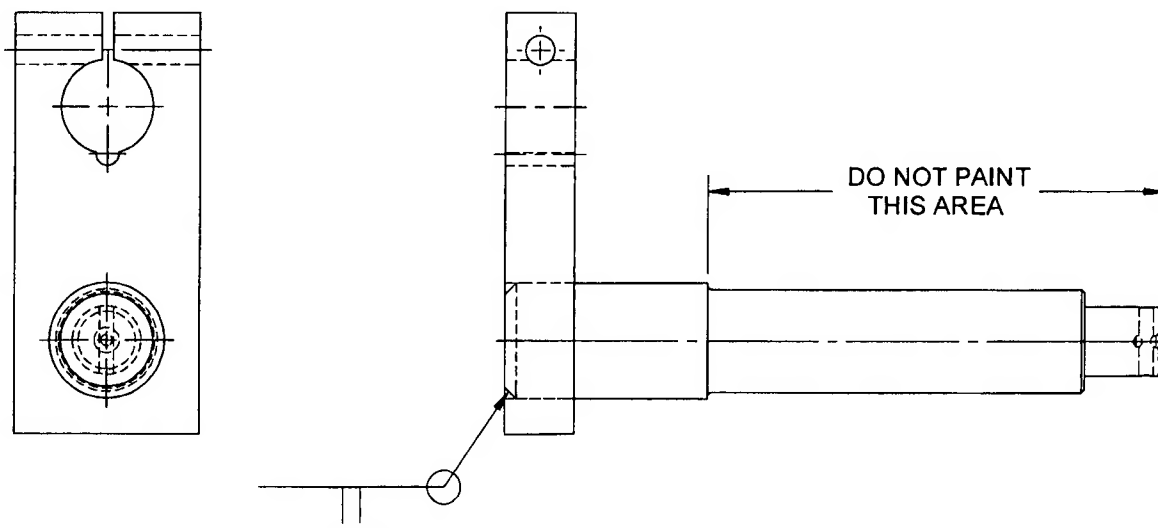
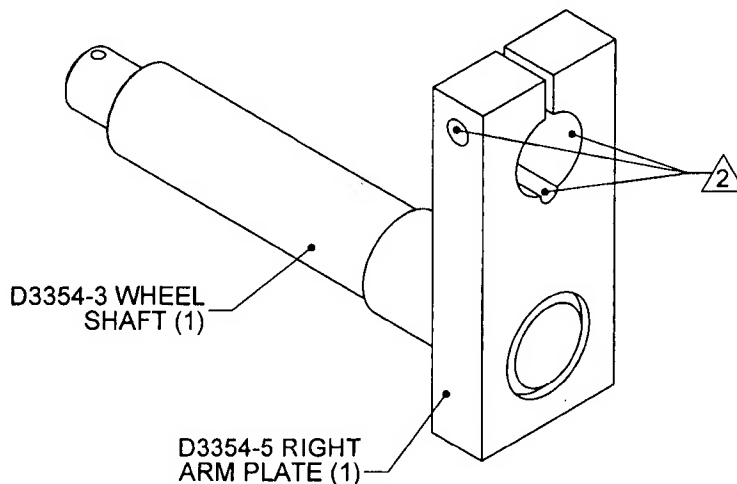
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CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. <b>D3354</b>	REV. C SHEET 2 OF 7
DATE <b>07.12.06</b>		TITLE <b>LEFT ARM WELDMENT</b>	SCALE 1:2

RELEASED  
07/12/07 *[Signature]*



**D3354-043 RIGHT ARM WELDMENT**

**NOTES:**

- 1) WELD PER DART QSI 004
- 2) COVER INSIDE HOLES PRIOR PAINTING
- 3) FINISH: POWDER COAT PAINT FIRE RED (4.3.5.10) PER DART QSI 005 4.3
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) ALL DIMENSIONS ARE IN INCHES
- 6) BREAK ALL SHARP EDGES 0.010 TO 0.020

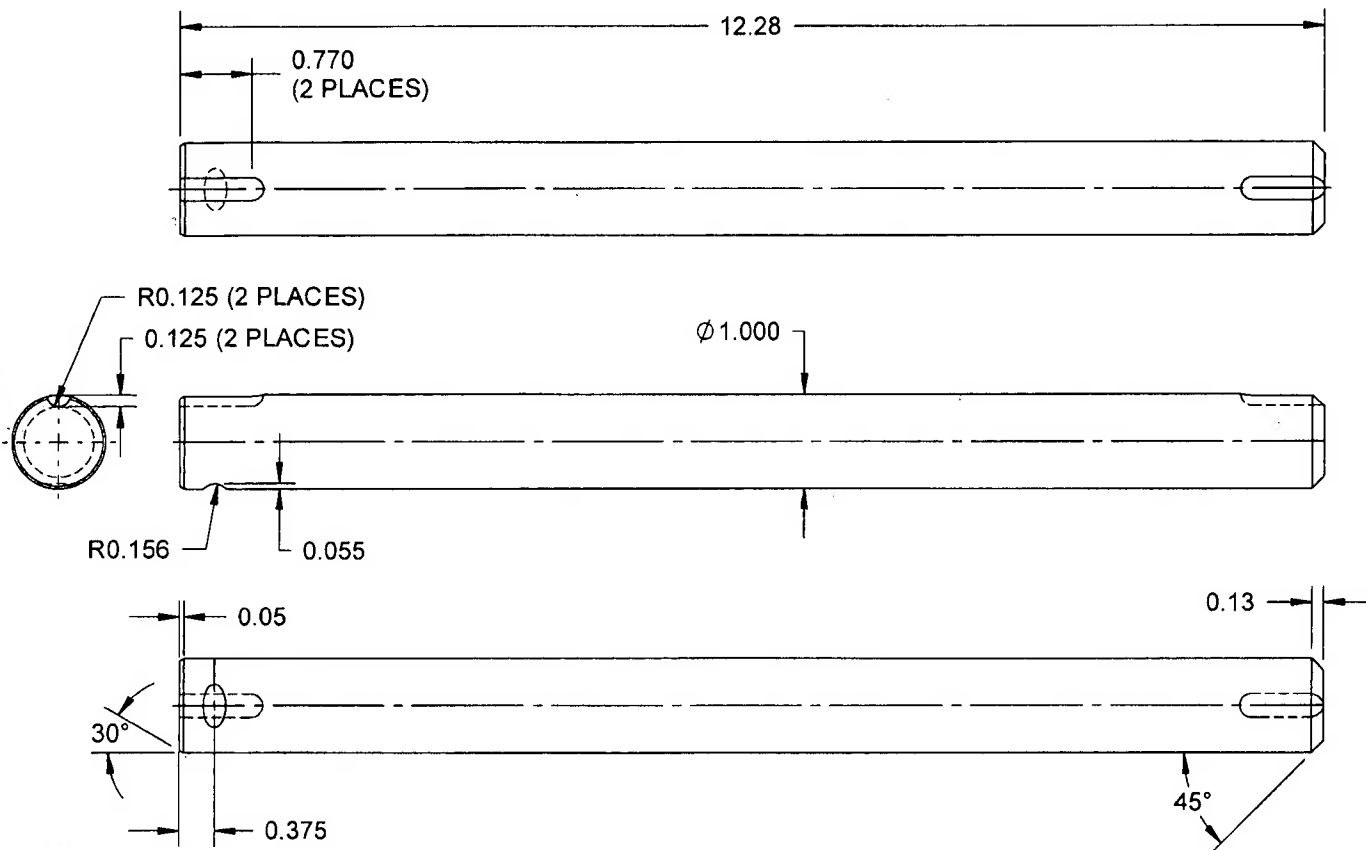
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CHECKED <i>J</i>	APPROVED <i>MP</i>	DRAWING NO. <b>D3354</b>	REV. C SHEET 3 OF 7
DATE <b>07.12.06</b>		TITLE <b>LEFT ARM WELDMENT</b>	SCALE 1:2

**RELEASED**  
07/12/07 *WP***D3354-1 INNER SHAFT**

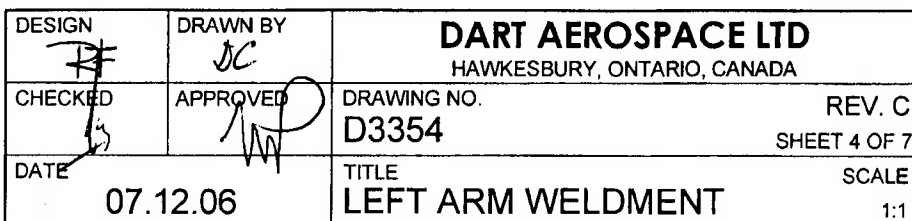
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**NOTES:**

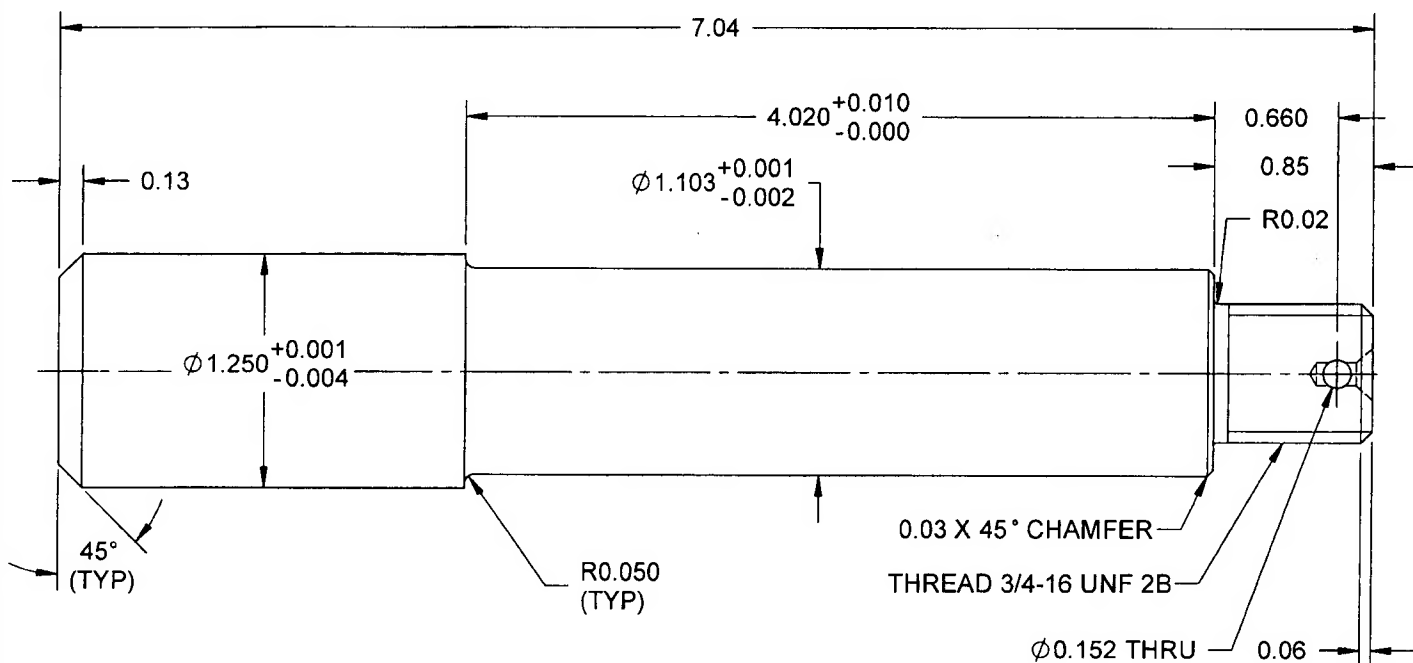
- 1) MATERIAL: AISI-4140 OR ASTM A304-02/ A-434-BC/ A193-03 - GRADE-B7/ A29-03/ A322-91 OR UNS#-G41400 ROUND BAR,  $\phi 1.250$  (REF. DART SPEC. M4140H-R)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010

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07.12.07



### D3354-3 WHEEL SHAFT

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**NOTES:**

- 1) MATERIAL: AISI-4130/ AISI-4140 OR ASTM A304-02/ A-434-BC/ A193-03 - GRADE-B7/ A29-03/ A322-91  
OR UNS#-G41400 ROUND BAR, Ø1.250 (REF. DART SPEC. M4140H-R)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.010 TO 0.020

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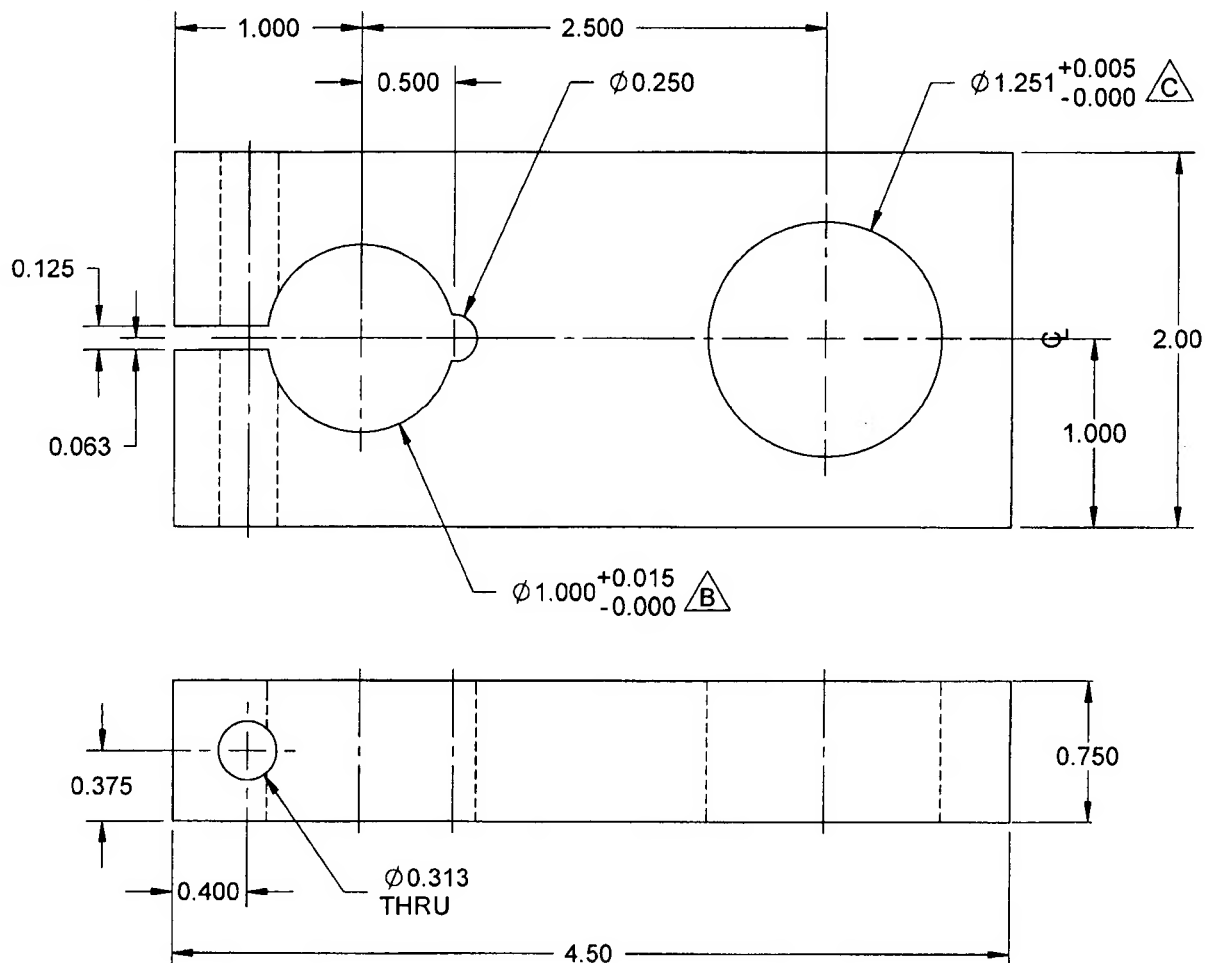
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CHECKED #	APPROVED #	DRAWING NO. D3354	REV. C SHEET 5 OF 7
DATE 07.12.06		TITLE LEFT ARM WELDMENT	SCALE 1:1

RELEASED  
07/12/07 MD



### D3354-5 RIGHT ARM PLATE

#### NOTES:

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A569/A570 OR CSA G40.21, 38W/44W/50W/60W/70W, 0.75 THICK MILD STEEL BAR (REF. DART SPEC. M1010-B)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.010 TO 0.020

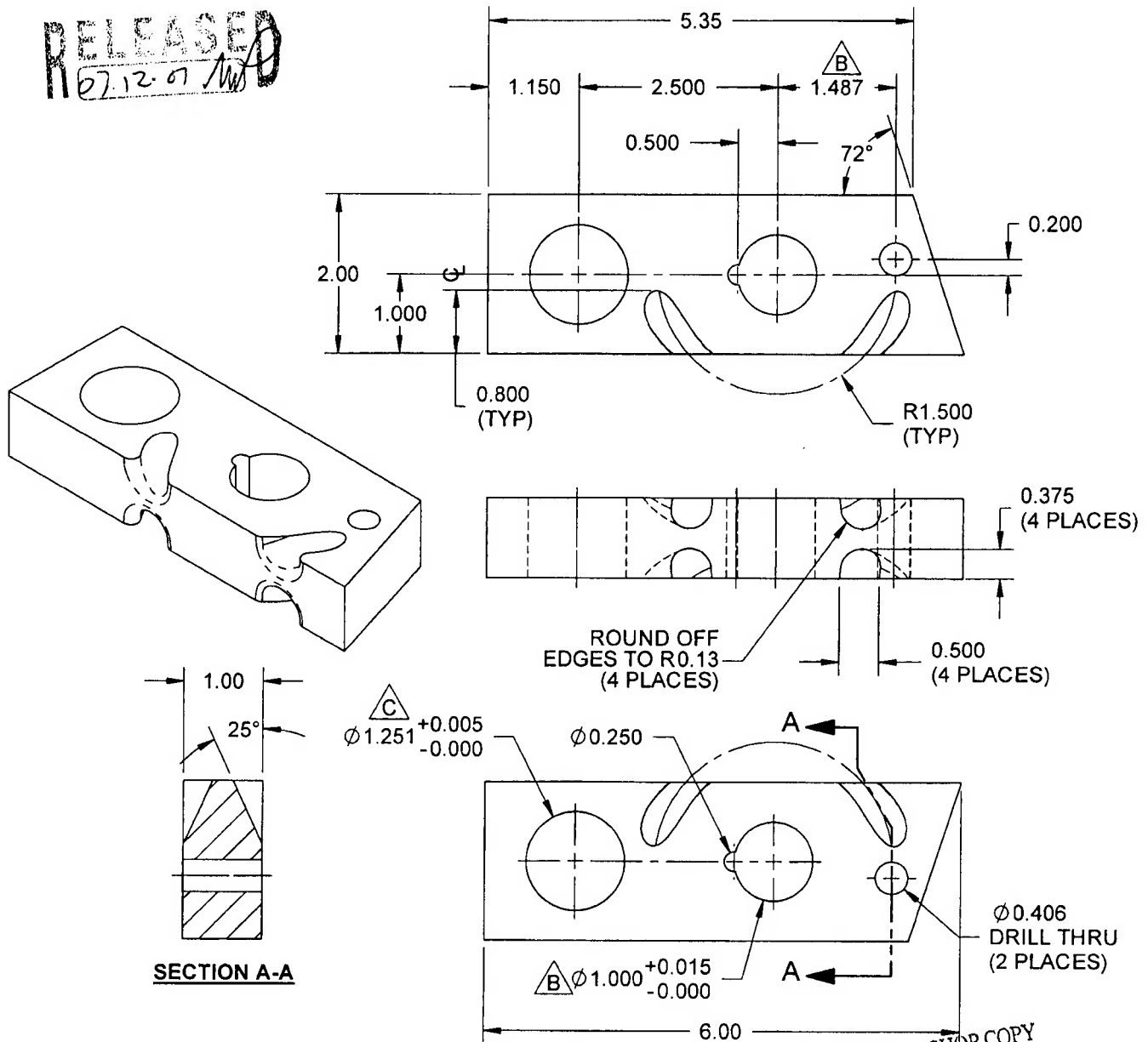
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DATE <b>07.12.06</b>		TITLE <b>LEFT ARM WELDMENT</b>	SCALE 1:2

**RELEASED**  
07.12.07 *MP***D3354-7 LEFT ARM PLATE****NOTES:**

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A569/A570 OR CSA G40.21, 38W/44W/50W/60W/70W, 1.00 THICK MILD STEEL BAR (REF. DART SPEC. M1010-B)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.010 TO 0.020

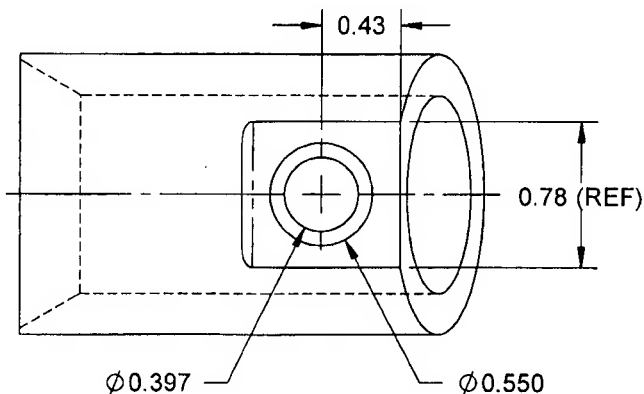
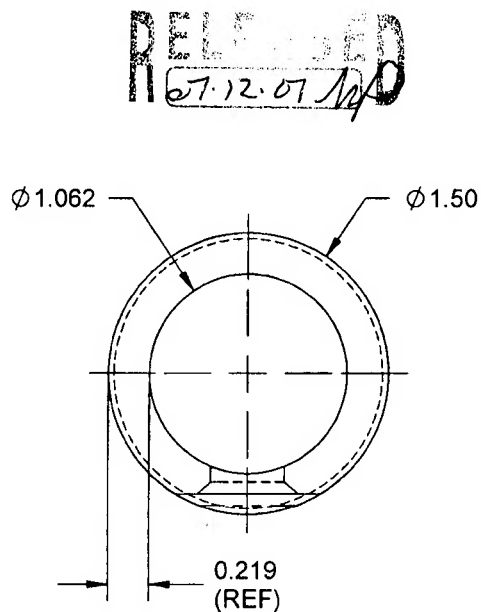
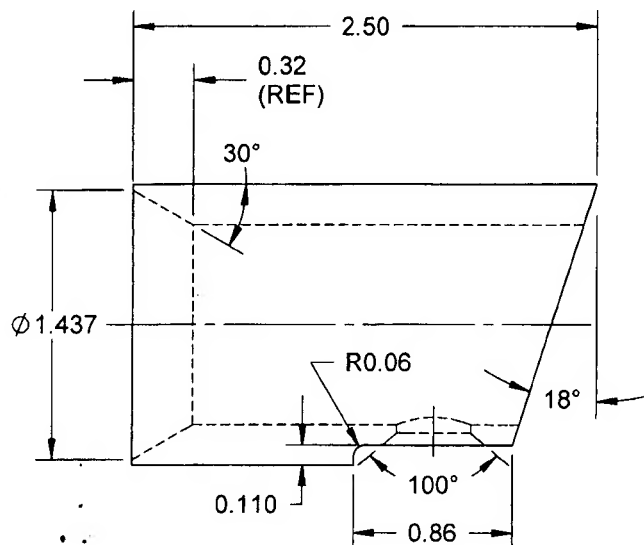
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DATE <b>07.12.06</b>		TITLE <b>LEFT ARM WELDMENT</b>	SCALE 1:1



### **D3354-9 HANDLE SOCKET**

#### **NOTES:**

- 1) MATERIAL: AISI 1010-1025 SEAM LESS ROUND TUBING PER MIL-T-5066 OR  
ASTM A513-00 MT1020 SRA OR AMS 5075 OR AMS 5077,  
(REF. DART SPEC. M1020TR1.250W.219)
- 2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) BREAK ALL SHARP EDGES 0.010 TO 0.020

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